

THE WARM WAVE OF DECEMBER, 1911.

In addition to the foregoing statements, the eight-day period beginning on the 6th seems to demand special discussion. It presented conditions almost unknown in December, and seemed like a complete reversal of the season's progress. Over a large part of the district grass made a very noticeable growth, dandelions and other plants began to bloom, and vegetation showed astonishing signs of quickening vitality. The average temperature for this period ranged from 40° to 50°, or from 8° to 17° above the normal. There were from three days to a week without freezing temperatures at night, and on the 11th or 12th the mean temperature was 25° or more above the normal, except at some stations near the coast, where the excess in temperature was somewhat less. The mean temperature on the 12th was 29° above the normal at Albany, N. Y., 21° above at New York City, 29° above at Boston, Mass., and 30° above at Concord, N. H. At Boston the warm period from the 10th to the 11th, inclusive, established new records for high temperature, not only with respect to the duration of excessive warmth, but also the maximum temperature and the highest minimum. On four consecutive days, beginning with the 10th, the maximum temperatures at Boston were 61°, 68°, 68°, and 61°, while the highest temperature previously recorded in December was 66°, the records containing no other instance of more than two consecutive days in December with temperatures above 60°. At Binghamton, N. Y., the average temperature for the warmest eight days was 17° above the normal, equal to the greatest excess for that period found in the records examined, but in December, 1895, the average temperature for the warmest eight days at Binghamton was 22° above the normal, which shows that the absolute extreme in December warmth that may be expected in this part of the country was not reached even in the remarkable period under discussion. The following table summarizes the conditions that marked the warmest eight days of December, 1911, in various parts of the North Atlantic States:

Data for eight days, Dec. 6 to 13, 1911.

Stations.	Mean temperature.	Departure from the normal.	Mean temperature for warmest day.	Remarks.
Eastport, Me.	42	+14	51	Highest for December in 38 years, 57° on 11th.
Portland, Me.	42	+13	57	Warmest December period of eight days since 1872.
Concord, N. H.	41	+13	58	Highest for December in 40 years, 65° on 12th.
Block Island, R. I.	48	+10	58	Warmest December period in 29 years.
Providence, R. I.	47	+14	58	No data for comparison prior to 1904.
Boston, Mass.	50	+16	61	Highest maxima and minima ever recorded in December.
New Haven, Conn.	49	+12	50	
Albany, N. Y.	43	+15	57	
Binghamton, N. Y.	45	+17	55	Warmest December day in 21 years, the 11th.
New York, N. Y.	48	+13	56	Warmest December period since 1889.
Harrisburg, Pa.	47	+13	56	
Philadelphia, Pa.	50	+14	56	Warmest eight days for December except in 1895.
Scranton, Pa.	48	+17	60	
Atlantic City, N. J.	49	+12	54	Warmest December weather since 1889.
Cape May, N. J.	48	+ 8	53	Many flowers and plants in bloom.

PRECIPITATION.

No very uncommon features appear in the precipitation records of the district. The daily amounts, however, were generally small, there being but two instances of

excessive precipitation, both of which occurred in Maine. The first 14 days of the month were rather dry, probably not more than one-fifth of the month's precipitation occurring before the 15th, considering the district as a whole. From that date until the end of the month the frequency of precipitation was fully equal to that common to December. The dates of the heaviest and most extensive precipitation were the 4th, 15th, 16th, 22d, 23d, 27th, and 31st. There were also general rains or snows in some States on the 2d, 9th, and 13th, besides light scattered rains and snow flurries on a few other dates. In some localities there were scarcely any fair days after the 14th, light precipitation occurring nearly every day between the principal storm periods.

The average precipitation for the district was about 3.26 inches, an amount nearly equal to the normal for the district as a whole, but there was a slight deficiency in all of the States of the district except West Virginia, Virginia, Maryland, and Delaware, where the precipitation was in excess of the normal. The only station in the district recording less than 1 inch as the total precipitation was Lawrenceville, Pa., where the amount was 0.75 inch. Two stations reported more than 6 inches—Scarsdale, N. Y., 6.54, and Salisbury, Md., 6.12 inches.

Generally speaking, the storms of the month were not attended by high, destructive winds, but on the morning of the 29th two dams on the Neponsett River, near Boston, broke as a result of the driving force of the gale. The avalanche of water that rushed down the stream into the city caused the death of two men and injured others, besides destroying much property. Press reports told of panic that arose among factory employees in Boston when the news of the coming torrent was received. The high wind in and about Boston felled many trees, some of which struck and seriously injured persons. Other serious injuries to persons resulted from bricks falling from chimneys demolished by the wind.

SNOWFALL.

The snowfall was unusually light, being less than that for the preceding month in probably more than half of the district. Only the northern part of Maine and the extreme upper Hudson watershed received more than 10 inches. For that part of the district south of the latitude of Harrisburg, Pa., the average was scarcely half an inch, some stations recording none and many others only a trace. Several inches of snow fell in northern New England on the 2d and 3d. In New York the greatest snowfall occurred at most stations on the 4th, when extensive areas in the southeastern and central counties were covered with snow to a depth of 4 inches or more. At Scarsdale, Westchester County, N. Y., the storm of this date gave a snowfall of 12 inches, and snow lay to a depth of 6 inches or more over most of the region for a considerable distance around the city of New York and caused serious interference with metropolitan and suburban traffic. Occurrences of moderately heavy snowfall were observed in the northern sections between the 15th and 18th, but the period extending from the 5th to the 27th was quite free from snow outside the coldest regions of the district. Light snows fell frequently after the 27th southward to Maryland, and in some parts of the northern sections there were snows exceeding 4 inches on the 28th, 29th, and 31st.

RIVER CONDITIONS.

Large quantities of snow in the northern States were melted during the warm weather prior to the middle of the month, and the average stages of the rivers were higher than usual for December. During the second

half of the month the stream flow was fairly well sustained by the rains of that period. Hence, there was not much variation in the volume of water in the principal streams during the month. No floods were reported in any part of the district.

SUNSHINE.

There was an average of 125 hours of sunshine, according to the records of 13 stations, a very fair amount for

the month of shortest days. The percentage of the possible sunshine was least, 33, at Harrisburg, Pa., and greatest, 55, at Portland, Me. At Washington, D. C., Mount Weather, Va., and Albany, N. Y., also the percentage was less than 40, and at Atlantic City, N. J., greater than 50. The average number of days with 80 per cent or more of the possible sunshine was 9 and with 20 per cent or less, 14. There was an average of 10 clear, 8 partly cloudy, and 13 cloudy days.